

ABSTRACT:

Described is a novel gene and its encoded secreted tumor antigen, termed BPC-1, and to diagnostic and therapeutic methods and compositions useful in the management of various cancers which express BPC-1, particularly including prostate cancer and bladder cancer. In human normal tissues, BPC-1 is only expressed in certain tissues of the brain. However, BPC-1 is expressed at high levels in prostate cancer cells and is also expressed in bladder cancer cells. The structure of BPC-1 includes a signal sequence and a CUB domain. BPC-1 protein is secreted. Preliminary experimental evidence suggests that BPC-1 is directly involved in oncogenesis or maintenance of the transformed phenotype of cancer cells expressing BPC-1. BPC-1 also appears to bind specifically to a cellular protein expressed in prostate cancer cells and other cells.